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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/662,743	09/15/2003	Elbert L. McKague JR.	TA-00491C	1536
7590	01/07/2005		EXAMINER	
BRACEWELL & PATTERSON, L.L.P.			PIZIALI, ANDREW T	
P. O. Box 61389				
Houston, TX 77208-1389			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 01/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/662,743	MCKAGUE ET AL.	
	Examiner	Art Unit	
	Andrew T Piziali	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM
 THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 06 December 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 29,30,36 and 37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 29,30,36 and 37 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 September 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____.
- 4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: _____.

DETAILED ACTION

Response to Amendment

1. The amendment filed on 12/6/2004 has been entered. The examiner has withdrawn the objection to the specification based on the amendment to the specification. The examiner has withdrawn the objection to claim 29 based on the amendment to claim 29. The examiner has withdrawn the 35 USC 112, first paragraph rejection of claims 29-30 and 36-37 based on the amendments to claims 30 and 37 such that the skins are no longer unimpregnated with resin. The examiner has withdrawn the 35 USC 112, second paragraph rejections of claims 29-30 and 36-37 based on the amendments to claims 29 and 36. Applicant's amendments necessitated the new grounds of rejection presented in this Office action.

Election/Restrictions

2. Claims 26-28, 31-35 and 38-42 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 12/6/2004.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 29-30 and 36-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over USPN 6,655,633 to Chapman, Jr. (hereinafter referred to as Chapman) in view of any one of

USPN 5,469,686 to Pykiet or French Patent No. 1,262,381 to Parsons Corporation (hereinafter referred to as Parsons).

Regarding claims 29-30 and 36-37, Chapman discloses a structural component comprising a pair of outer skins, each formed from composite layers of fabric that include a layer of collimated fibers supported by a sparse number of transverse fibers (unidirectional fabric); a plurality of removable mandrels located between the outer skins; and a plurality of inner composite socks (supports) tightly enclosing each of the mandrels, each of the socks formed of composite layers of fabric, the socks having surfaces in contact with the skins and with adjacent socks to couple the outer skins together; and wherein the structural component is shaped to be positioned and cured within a mold (see entire document including column 1, lines 15-65, column 3, lines 35-44, column 3, line 64 through column 4, line 27, the paragraph bridging columns 4 and 5, column 8, lines 13-39, and Figure 3).

Chapman discloses that the composite layers of fabric (socks) that conform to the shape of the mandrels may comprise unidirectional fabric (paragraph bridging columns 3 and 4), but Chapman does not mention braided or woven fabrics. Pykiet and Parsons each disclose that it is known in the art to wrap mandrels in braided or woven fabrics (see entire documents including column 2, lines 43-51 of Pykiet and page 4, lines 26-30 of Parsons). It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the mandrel fabric in any suitable configuration, such as unidirectional, woven, or braided, because it is within the general skill of a worker in the art to select a known fabric configuration on the basis of its suitability.

Regarding claims 30 and 37, Chapman discloses that the skins and the socks are uncured (pre-cured) before the entire structure is to be cured and the mandrels are to be removed (paragraph bridging columns 4 and 5).

Response to Arguments

5. Applicant's arguments have been considered but are moot in view of the new grounds of rejection.

Conclusion

6. Applicant's amendment necessitated the new grounds of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew T Piziali whose telephone number is (571) 272-1541. The examiner can normally be reached on Monday-Friday (8:00-4:30).

Art Unit: 1771

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on (571) 272-1478. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

atp

GJF, 12/30/04
ANDREW T. PIZIALI
PATENT EXAMINER

Terrel Morris
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SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700